

**AMENDMENTS TO THE CLAIMS:**

Please amend claim 1 and add new claims 13-17, as shown below.

This listing of claims will replace all prior versions and listings of claims in the  
Application:

**Claim 1 (currently amended):** A spectroscopy system for characterizing surface phenomenon  
comprising:

at least one light source operable to generate a source beam,

an optical element having an optical surface and a rear surface,

a support block formed in contact with the rear surface of the optical element, the  
support block having formed therein [[with]] at least one sample well having a center and at  
least one port having a passageway leading from a lower portion of said at least one sample  
well, the source beam being aimed at the sample well, the support block being disposed on the  
optical surface thereby defining a substantially vertical rear cell surface having a center,

a syringe filled with a membrane solution in fluid communication with a needle having  
a distal end disposed in front of the sample well, the distal end being aimed at a point above the  
center of the rear cell surface, the syringe be operable to eject a steady stream of membrane  
solution from the needle onto the circular rear cell surface thereby forming a membrane  
defining at least a portion of a layer under test, the membrane having a substantially uniform  
thickness that covers substantially the entire rear cell surface, and

a detector operable to detect light that is at least one of reflected and scattered by the  
layer under test.

**Claim 2 (original):** The system of claim 1 comprising:

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at least one actuator coupled to the syringe and a processor coupled to the actuator wherein the processor is operable to initiate the formation of the membrane.

**Claim 3 (original):** The system of claim 1 wherein the optical element is at least one of a prism, mirror, lens and optical fiber.

**Claim 4 (original):** The system of claim 3 wherein the optical surface is at least partially coated with a metallic coating.

**Claim 5 (original):** The system of claim 4 wherein the metallic coating is at least partially coated a dielectric layer.

**Claim 6 (original):** The system of claim 1 comprising:

a plurality of syringes each having at least one associated actuator and a processor coupled to the actuators wherein the processor is operable to initiate the delivery of fluids to the sample well.

**Claim 7 (withdrawn):** A method of forming a membrane in a spectroscopy system comprising:

providing an optical element having an optical surface,

providing a support block formed with at least one sample well having a center, the support block being disposed on the optical surface thereby defining a substantially vertical rear cell surface having a center,

providing a syringe filled with a membrane solution in fluid communication with a needle having a distal end disposed in front of the sample well,

aiming the distal end being at a point above the center of the rear cell surface,

ejecting a steady stream of membrane solution from the needle onto the circular rear cell surface thereby forming a membrane defining at least a portion of a layer under test, the

membrane having a substantially uniform thickness that covers substantially the entire rear cell surface.

**Claim 8 (withdrawn):** The method of claim 7 comprising:

providing at least one actuator coupled to the syringe and a processor coupled to the actuator wherein the processor is operable to initiate the formation of the membrane.

**Claim 9 (withdrawn):** The method of claim 7 wherein the optical element is at least one of a prism, mirror, lens and optical fiber.

**Claim 10 (withdrawn):** The method of claim 9 wherein optical surface is at least partially coated with a metallic coating.

**Claim 11 (withdrawn):** The method of claim 9 wherein the metallic coating is at least partially coated a dielectric layer.

**Claim 12 (withdrawn):** The method of claim 7 comprising:

providing a plurality of syringes each having at least one associated actuator and a processor coupled to the actuators wherein the processor is operable to initiate the delivery of the fluids to the sample well.

**Claim 13 (new):** The system of claim 1, comprising a plurality of syringes each connected to a different supply reservoir.

**Claim 14 (new):** The system of claim 13, wherein one of the supply reservoirs is a wash solution.

**Claim 15 (new):** The system of claim 1, wherein the support block comprises three sample wells.

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**Claim 16 (new):** The system of claim 15, wherein the optical surface includes coated and uncoated portions, and one of the sample wells is located on an uncoated portion of the optical surface.

**Claim 17 (new):** The system of claim 15, wherein the optional surface includes coated and uncoated portions, and one of the samples well is located on a coated portion of the optical surface.

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